DEFENSE INFORMATION INFRASTRUCTURE (DII)

COMMON OPERATING ENVIRONMENT (COE)

DII COE Version Description Document
for
DISTRIBUTED FILE SERVICE SERVER (DFSS) Segment v1.0.0.5
(Solaris 2.5.1)
Version Description Document
12/09/96

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1. System Overview

The DFSS Distributed File Service Server (DFSS) Segment allows DCE (Distributed Computing Environment) based networks to create and administer a single file space spread across multiple platforms at different locations. The DFSS provides management tools which transparently replicate, move and backup of data. DFSS takes advantage of DCE services to provide access control and reliability over an enterprise wide network. .

2. Reference Documents

- *Transarc DCE 1.1 Command Reference*
- *Transarc DCE 1.1 Command Reference Supplement*
- *Transarc DCE Installation and Configuration Guide*
- *Transarc DCE Introduction*
- *Transarc DCE Administration Reference*
- *Transarc DCE Administration Guide*
- *Transarc DCE DFS Administration Guide*
- *OSF^â DCE Application Development Guide - Introduction and Style Guide*
- *OSF^â DCE Application Development Guide*
- *OSF^â DCE Application Development Reference*
- *Transarc DCE Upgrade Instructions and Release Notes (Solaris 2.5)*
- Version Description Document Defense Information Infrastructure (DII) Common Operating Environment (COE) *Distributed File Service Server (DFSS) Segment* Version 1.0.0.5, December 09, 1996.

3. Version Description

3.1 Inventory of Materials

- Magnetic Media: Two 8mm tapes consisting of relative tar of the Distributed File Service Server (DFSS) Segment, Version 1.0.0.5/Solaris 2.5.1, December 09, 1996
- Version Description Document Defense Information Infrastructure (DII) Common Operating Environment (COE) Distributed File Service Server (DFSS) Segment, Version 1.0.0.5, December 09, 1996
- *Installation Instructions for the Distributed File Service Server (DFSS) Segment* v1.0.0.5, December 09, 1996

3.2 Software Changes

Reference Appendix A for a list of the DFSS Segment software changes.

4. Installation Instructions

Reference the *Installation Instructions for the Distributed File Service Server (DFSS) Segment* v1.0.0.5 for instructions on installing the DFSS Segment.

5. Known Problems and Errors

There are no known problems or errors to report for this segment.

6. Release Notes

6.1 General

1. The *Transarc DCE Upgrade Instructions and Release Notes Solaris Version 2.5 (SunOS Version 5.5)* contains the following note:
   "Solaris 2.5 is not binary-compatible with Solaris 2.5.1. Support for Solaris 2.5.1 is not included as part of this release but will be incorporated into future release of Transarc DCE."

   This is INCORRECT. Transarc DFS for Solaris 2.5 will operate normally on a Solaris 2.5.1 machine.

6.2 Installation Warning

During the installation of the DFSS segment you may see the following warning

    WARNING:
    The <TRDCEclnt> package "Distributed Computing
    Environment Client Package" is a prerequisite
    package and is not completely installed."

You may ignore this warning and continue with the installation.

6.3 De-Install Procedures

The DCES segment cannot be de-installed using the Segment Installer. To de-install the DCES segment, login as root and do the following steps:

Step 1:
    login as root and do the following:

Step 2:
    Unconfigure all DCE/DFS components on the machine using the command:
        /etc/dcesetup unconfig

You may be instructed to issue this command twice depending on whether or not the machine is also a DFS client.

Step 3:

De-install the DFS server software with the command:
/etc/dcesetup uninstall dfsserver.

Step 4:

Remove the DFSS directory structure under the **/h** partition using:
/usr/bin/rm -r /h/COTS/DFSS

Step 5:

Finally, to remove the DFSS menu item from the sysadmin menubar. Remove the following lines from the **/h/USERS/local/Profiles/SA_Default/Menus/SA_Default.main** file:

```
# === Begin DFS Server Segment =====
#-------------------
# DCE Menu Items
#-------------------
APPEND  :DCE
ITEM    :Configure DFS
Servers:/h/COTS/DFSS/SegDescrip/dfsconfig.button:1:1:1:R1
APPENDEND      :
# ===  End  DFS Server Segment =====
```

Logging out and back into the environment will update the **<NETWORK> | <DCE>** menu.

6.4 The DFSS Segment and Hierarchical Cell Names

The DFSS segment will not operate a cell that has a cell name that contains a forward slash "/". Example (gccs.smil.mil/acom or foo/bar).

7. Patch List

7.1 Solaris Operating System Patches

The Solaris 2.5 Recommended Patches" supersedes earlier patches. Once the machine is running Solaris 2.5 and these patches are installed, you no longer need to install the software patches listed in Section 2.1.2.1, "Applying Required Software Patches from Sun," of the Transarc DCE Release Notes for Solaris 2.4.

Sun Ultra Platforms:

Version 1.1. of the Transarc DCE product for Solaris 2.5.1 requires one patch. This patch corrects a kernel problem in the Solaris operating environment.

patch ID 103093-03

7.2 Transarc System Patches

Patch 5

Binaries affected:

Solaris 2.5 US

```
./dce1.1/bin/acl_edit
./dce1.1/bin/cm
./dce1.1/bin/cdsd
./dce1.1/bin/cdsadv
./dce1.1/bin/cdsclerk
 ./dce1.1/bin/dceback
./dce1.1/bin/dced
./dce1.1/bin/dcecp
./dce1.1/bin/dtsd
./dce1.1/bin/fts
./dce1.1/bin/secd
./dce1.1/bin/login.dce
./dce1.1/bin/login_reset
./dce1.1/dcecp/cell.dcp
./dce1.1/dcecp/host.dcp
./dce1.1/etc/dce_modules/kernel
./dce1.1/etc/dce_modules/login
./dce1.1/kernel/drv/krpch
./dce1.1/kernel/fs/dfs
./dce1.1/kernel/fs/lfs
./dce1.1/kernel/sys/dfscore
./dce1.1/nls/msg/en_US.ASCII/dfscmu.cat
./dce1.1/nls/msg/en_US.ASCII/dfszhs.cat
./dce1.1/nls/msg/en_US.ASCII/dfszcm.cat
./dce1.1/nls/msg/en_US.ASCII/dfszpx.cat
./dce1.1/share/include/dce/pthread_basic.h
./dce1.1/usr/lib/libaudit.a
./dce1.1/usr/lib/libdce.a
./dce1.1/usr/lib/libdce.so.3
./dce1.1/usr/lib/libtcl.a
./dce1.1/usr/lib/libdcecp.a
```

SUMMARY OF FIXES:

- lb_admin fails after start of HP's PerfView product

- host unconfig /.:/hosts deletes all host cds entries
- dcesetup needs to sync before changing /etc/name_xxx
- Add additional message when dceback -host is used without "local"
- unix id bounds are not handled consistently
- Fixes issues with CN RPC call hanging, possibly related to maybe RPC calls
- Solves issue with core dumps in dced group override parsing
- Fixes defect with cdsadv hanging on a semop in a syscall.
- Fixes problem with core dump in binding_cache_lookup():sec rca layer
- Repairs dcesetup config not checking for time skew w/ master secd
- Fixes problem with dced dumping core with damaged login context
- Fixes issue with dcecp endpoint show giving connection rejected on udp-only machine
- Repairs problem with integrated login: uid and gid overrides don't work
- Fixes possible tight loop in secd if starting up with corrupted db
- Fixes problem with dce_acl_resolve_by_name failing
- Fixes problem with dced, allowing ig to rebind to alternative site if the registry
  becomes unavailable
- Solves problem with the function sec_rgy_site_bind returning an unavailable site
- Fixes problem with DCED not stopping on shutdown, DTS error
- Solves problem with Encina application server dropping core when calling dce routine
- Fixed process_tgs_req call which appeared to be causing free-list corruption in secd
- Fixed issue with the predicate in dce_aud_next not working correctly
- Fixes defect with function sec_login_refresh_identity deref null pointer
- Fixes defect with function uuid_create generating duplicates
- Fixes issue with thread.h and _POSIX_SOURCE in conflict on Solaris 2.5
- Fixes problem with the command login_reset failing
- Fixes problem with ACL entry for a deleted principal not being deleted.
- Fixes defect with episode panicking in vol_efsIoDone with B_DONE set.
- Solves problem with start secval commands resulting in stack overflow when loading DFS kernel modules
 - Solaris AFS/DFS Integrated login bug if user is in too many groups
 - dcecp group create sets projlist to no, docs say yes
 - Enable Episode access caching
 - cdsd gives RPC_CN_AUTH_VFY_CLIENT_REQ on server failed: can't find appropriate seal
 - cm_ConnByMHosts infinite loop when dfsbind dies
 - BulkFetchStatus can violate pipe discipline
 - cm lscellinfo (and PIOCTL) return incorrect info
 - dcecp fails to process command abbreviations
 - dcecp gets confused about its CDS access

- dcecp can be unpredictable in interactive mode after error
- rpcd end-point map clean-up logic fails with large number of entries
- Same-owner checks are done without reference to cellid
- Corrects the problem of sec_rgy_attr_lookup_by_id fails if some attrs are deleted
- Correct rpc_mgmt_is_server_listening() hang
- Unexpected synlink() names create non-mount-points
- Need a way for an admin to enable a password-retry-disabled account
- DCE-rpc-0022 when adding acls during Setup DCE for Encina
- fx: unexpected truncation of file
- dcecp -c cell ping -clients does not accurately return status of all clients in cell - shows OK even if some are down
- deadlock occurring in rpc__cn_call_start()
- cdsd on the replica clearinghouse keeps core dumping
- The function 'sec_key_mgmt_manage_key()' always fails with passwd
- The function 'sec_key_mgmt_change_key()' corrupts keytab file if the registry is read-only
- Problem detecting a change in the callback address which prevents the connection from being re-established
- The command 'dcecp -c cell ping -clients' does not accurately reflect the state of clients in a DCE 1.1 cell

Appendix A
Software Changes

The DFSS segment cannot be de-installed using the COE Segment Installer. Please read the DFSS segment release notes for instructions on how to successfully de-install.